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REMARKS

Claims 8-15 have been canceled. Claims 1-7 remain pending in the application.

Applicants amend claim 1 for clarification, and refer to Figs. 1-3, and their corresponding description in the specification for exemplary embodiments of and support for the claimed invention. No new matter has been added.

Claims 1-5 and 7 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,750,022 to Curry et al.; and claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Curry et al. in view of U.S. Patent No. 6,385,773 to Schwartzman et al. Applicants amend claim 1 in a good faith effort to further clarify the invention as distinguished from the cited reference. Applicants respectfully traverse the rejections.

The Examiner maintained the claim rejections by applying the description of Noise-ME 25 “located at the PH-Sub 27” and generating “a signal to control LPC 16 to control subsequent upstream transmissions” as alleged disclosure of the claimed feature of directly triggering upwards signal attenuation by a control signal generated by a noise-reduction device that is provided between a center and terminals. Page 2, line 14 to page 3, line 3 of the Office Action.

Applicants respectfully submit that the signal generated by Noise-ME 25 “located at the PH-Sub 27” goes to LPC 16, which returns a control signal back to PH-Sub 27 for signal attenuation. As such, Curry et al. merely describe a measurement signal that is forwarded to LPC 16 that, in turn, issues a control signal back to PH-Sub 27 for signal attenuation. And thus, Curry et al., as cited and relied upon by the Examiner, do not disclose a noise-reduction device that detects noise increase to generate a control signal and is directly triggered by the generated control signal to attenuate upward signals, as claimed.

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The Examiner further relied upon description in Curry et al. of phantom subscribers performing "other command functions" such as using a phantom subscriber "to control the gain as a function of frequency across the bandwidth either or both of the upstream and downstream amplifiers in its locality" as alleged disclosure of the claimed invention. Page 3, lines 3-16 of the Office Action (citing col. 20, lines 29-34 of Curry et al.).

Applicants respectfully submit that the cited portions of Curry et al. merely describe additional functions that may be performed using the described phantom subscriber in the context of the system described in Curry et al. where a phantom subscriber performs such functions on a "command from the LPC 16." Col. 20, lines 19-20 of Curry et al. Indeed, commands from the LPC 16 to the phantom subscribers to perform command functions is the consistent paradigm by which the system described in Curry et al. operates. Please see, e.g., the summary of the invention of Curry et al. at col. 2, lines 28-39. And the above portions of Curry et al. cited by the Examiner are no exception,

"[o]n one command from the LPC 16, a phantom subscriber could cause a noise measurement to be made. Each phantom subscriber could also include a transmitter for transmitting the digitized noise measurement to the LPC 16 upon another command from the LPC 16. Control lines, similar to those carrying the amplifier gain command and the RF switch command, could be used to cause these additional components to initiate the noise measurement and upstream noise measurement transmission functions. Furthermore, each phantom subscriber could perform other command functions other than those described. For example, a phantom subscriber could be used to control the gain as a function of frequency across the bandwidth of either or both of the upstream and downstream amplifiers in its locality." Col. 20, lines 19-34 of Curry et al.
(Emphasis added)

Thus, "control lines" may be "used," similar to lines "carrying the amplifier gain command" (from the LPC 16), to carry the initiation command from the LPC 16 to "cause these

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additional components to initiate the noise measurement.” Indeed, control lines could not spontaneously cause such initiation without a command from LPC 16. With respect to the phantom subscribers, the above-cited portions describe “other command functions other than those described” and provides an example of such functions—controlling the gain as a function of frequency across the bandwidth instead of signal control based on noise measurements. Thus, in context, the “other command functions” refer to alternative “uses” for these phantom subscribers other than for noise measurement, e.g., determining the bandwidth. And the cited portions of Curry et al. do not disclose or suggest removing the LPC 16 from issuing commands to these phantom subscribers for these alternative functions. The Examiner referred to the phrase “in its locality” in the Office Action. But Applicants respectfully submit that this phrase is merely consistent with the notion that the phantom subscribers are used by commands from the LPC 16 to perform functions in their respective localities—noise measurement as the principle embodiment of the system described in Curry et al., and gain control by frequency across the bandwidth in the cited portions. It would, therefore, be improper hindsight from the claimed invention to read into such portions of Curry et al. the suggestion that LPC 16 be removed from issuing commands for “using” these phantom subscribers to perform the described functions.

Therefore, Curry et al., as applied by the Examiner, fail to disclose,

“[a] system for reducing noise in a signal line, through which upward signals and downward signals are transmitted between a center and terminals, comprising:

a noise-reduction device, provided between the center and the terminals, which detects a noise increase regarding the upward signals on the signal line spontaneously without a noise measurement command from the center to generate a control signal indicative of the noise increase, and is directly triggered by said control signal to attenuate the upward signals by an increased amount without transmitting the control signal to the center; and

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a noise-control device, provided at the terminals, which boosts a transmission level of the upward signals by an amount compensating for the attenuation of the upward signals by said noise-reduction device," as recited in amended claim 1. (Emphasis added)

Advantageously, the claimed invention provides for noise-reduction devices that independently perform noise measurement and signal attenuation. These devices, therefore, do not require adding control functionality at an existing headend, thus reducing the required investment for their functional improvements to existing systems.

Accordingly, Applicants respectfully submit that claim 1, together with claims 2-5 and 7 dependent therefrom, is patentable over Curry et al. for at least the above-stated reasons. The Examiner relied upon Schwartzman et al. as a combining reference to specifically address the additional features recited in dependent claim 6. Therefore, even assuming, *arguendo*, that it would have been obvious to one skilled in the art to combine Curry et al. and Schwartzman et al., the combination would still fail to overcome the above-described deficiencies of Curry et al. with respect to base claim 1. For at least this reason, claim 6 is patentable over Curry et al. and Schwartzman et al., separately and in combination.

The above statements on the disclosures in the cited references represent the present opinions of the undersigned attorney. The Examiner is respectfully requested to specifically indicate those portions of the respective reference that provide the basis for a view contrary to any of the above-stated opinions.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

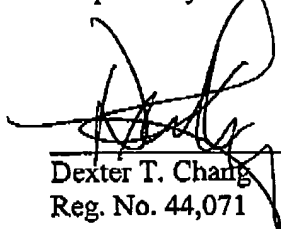
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Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



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